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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,451	04/12/2004	Chee-Shuen Lee	JCLA12897	4715
23900	7590	01/18/2007		
J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618			EXAMINER MRUK, GEOFFREY S	
			ART UNIT	PAPER NUMBER
			2853	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	01/18/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/823,451	Applicant(s) LEE ET AL.	
	Examiner Geoffrey Mruk	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13,27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-13,27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

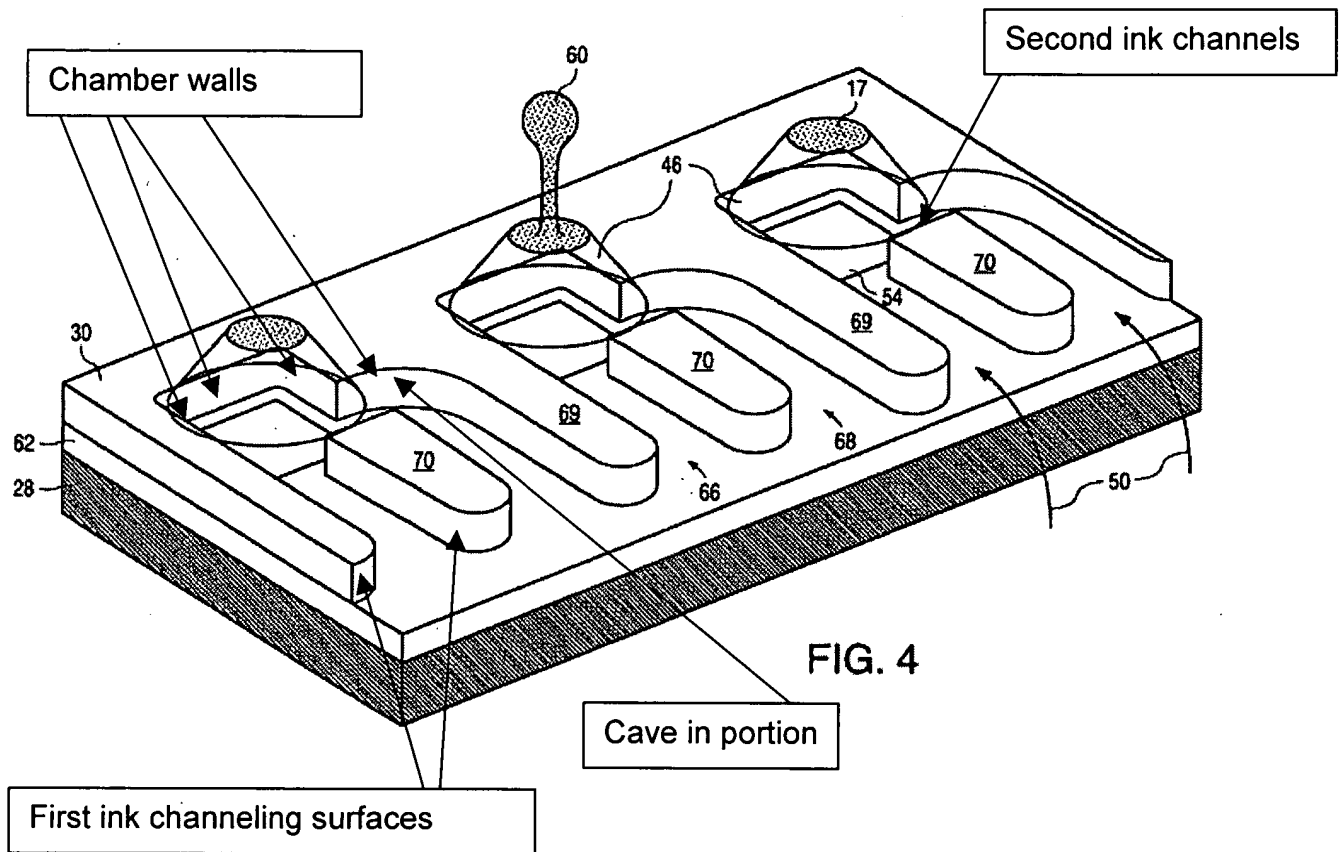
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-12, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Pietrzyk (US 6,312,112 B1).

With respect to claim 8, Pietrzyk discloses an inkjet print head (Fig. 1, element 14), comprising:

- an ink chip (Fig. 4, element 28), having a surface and at least an ink slot (Fig. 3, element 52) formed through the ink chip;
- at least a heater (Fig. 3, element 54), formed on the surface of the ink chip;
- a chamber layer (Fig. 4, element 30), having at least a first ink channel (Fig. 4, element 66) and at least an ink chamber (Fig. 4, element 46), formed on the surface of the ink chip, the ink chamber exposing the heater, the ink chamber connecting to the ink slot by the first ink channel, the ink chamber having a plurality of chamber walls (Fig. 4 below) and at least one of the chamber walls laterally caves in (Fig. 4 below) away from the heater to form at least a collecting room (Fig. 4, element 68; Column 3, lines 52-54); and

- a nozzle plate (Fig. 3, element 18), having at least a nozzle (Fig. 3, element 17) that is formed through the nozzle plate positioned on the chamber layer, wherein the nozzle is above the heater (Fig. 3, elements 17, 54).



With respect to claim 9, Pietrzyk discloses the print head further comprises an island (Fig. 4, element 70) formed on the surface of the ink chip (Fig. 4, element 28) between the first ink channel (Fig. 4, element 66) and the ink slot (Fig. 3, element 52).

With respect to claim 10, Pietrzyk discloses the chamber layer (Fig. 4, element 30) further comprises a pair of first-ink channeling surfaces (Fig. 4 above) with each first ink-channeling surface being positioned on each side of the first ink channel (Fig. 4, element 66).

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With respect to claim 11, Pietrzyk discloses the island (Fig. 4, element 70) has a pair of second ink-channeling surfaces (Fig. 4, element 70 sidewalls) such that the first ink-channeling surfaces and the second ink-channeling surfaces together form a pair of second ink channels (Fig. 4 above) that join with the first ink channel.

With respect to claim 12, Pietrzyk discloses each first ink-channeling surface (Fig. 4 above) and its corresponding second ink-channeling surface (Fig. 4 above) are parallel to each other (Fig. 4 above).

With respect to claim 27, Pietrzyk discloses an inkjet print head (Fig. 1, element 14), comprising:

- an ink chip (Fig. 4, element 28), having a surface;
- at least a heater (Fig. 3, element 54), formed on the surface of the ink chip; and
- a nozzle structural layer (Fig. 4, element 18), having at least a first ink channel (Fig. 4, element 66), at least an ink chamber (Fig. 4, element 46) and at least a nozzle (Fig. 3, element 17), positioned on the surface of the ink chip, wherein the ink chamber exposes the heater, the first ink channel allows an ink to supply into the ink chamber, the ink chamber has a plurality of chamber walls (Fig. 4 above) and at least one of the chamber walls laterally caves in (Fig. 4 above) away from the heater to form at least a collecting room (Fig. 4, element 68; Column 3, lines 52-54) and the nozzle is above the heater and corresponds to the ink chamber (Fig. 3, elements 17, 54).

With respect to claim 28, Pietrzyk discloses an inkjet print head (Fig. 1, element 14), comprising:

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- an ink chip (Fig. 4, element 28) with a surface and at least an ink slot (Fig. 3, element 52) formed through the ink chip;
- at least a heater (Fig. 3, element 54), formed on the surface of the ink chip;
- a nozzle structural layer (Fig. 3, element 18) having at least a first ink channel (Fig. 4, element 66), at least an ink chamber (Fig. 4, element 46) and at least a nozzle (Fig. 3, element 17), positioned on the surface of the ink chip, the ink chamber exposing the heater and the ink chamber connecting to the ink slot by the first ink channel, the ink chamber having a plurality of chamber walls (Fig. 4 above), at least one of the chamber walls laterally caving in (Fig. 4 above) away from the heater to form at least a collecting room (Fig. 4, element 68; Column 3, lines 52-54) and
- the nozzle being above the heater (Fig. 3, elements 17, 54) and corresponding to the ink chamber (Fig. 3, element 46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pietrzyk (US 6,312,112 B1) in view of Mizutani (US 6,659,594 B2).

With respect to claim 13, Pietrzyk discloses the nozzle (Fig. 3, element 17) is positioned directly above the collecting room (Fig. 4, element 68).

However, Pietrzyk fails to disclose the nozzle is not positioned directly above the collecting room.

Mizutani discloses an inkjet recording head where "the positions of the energy generating elements are relatively off-set with respect to the positions of the ink ejecting ports" (Column 3, lines 58-60).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the nozzle positioning with respect to the energy generating elements disclosed by Mizutani in the printhead disclosed by Pietrzyk. The motivation for doing so would have been "the linearity of an image can be maintained even if the timeshared drive is executed" (Column 3, lines 61-62).

Response to Arguments

Applicant's arguments, see page 6, lines 1-14, filed 1 November 2006, with respect to the rejection(s) of claim(s) 8, 27, and 28 under 35 U.S.C 102(e) as being anticipated by Rapp et al. (US 6,626,522) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Pietrzyk (US 6,312,112 B1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


The examiner makes of record that the claim objections dated 3 October 2006 are withdrawn in view of applicant's amendments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Mruk whose telephone number is 571 272-2810. The examiner can normally be reached on 7am - 330pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSM
1/5/2007



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER